

### **REMARKS**

In response to the Office Action mailed March 21, 2007, Applicants respectfully request reconsideration. Claims 1-13 are pending in this application, with claims 1 and 10 being independent. No claims have been added, amended or canceled herein. No new matter has been added.

### **Rejections under 35 U.S.C. §102**

The Office Action rejected claims 1, 2 and 5-13, including independent claims 1 and 10, under 35 U.S.C. §102(b) as purportedly being anticipated by the Digital Cellular Telecommunications Systems Publication, Haumont and Verkama, et al. as stated in the European Search Report of May 23, 2006. Applicants respectfully traverse these rejections.

#### **1. Discussion of References Relied Upon in the Office Action**

##### **A. Digital Cellular Telecommunications Systems**

The Digital Cellular Telecommunications Systems Publication is a GSM (Global System for Mobile Communications) technical specification describing the support of optimal routing for mobile communications. As described in the background section of the present application, this GSM technical specification proposes a technique for optimal routing in which a gateway mobile services switching center (GSMC) fetches call routing information directly from the home location register (HLR). Such a technique is illustrated in FIG. 1 of the GSM technical specification, which shows that GMSCA may fetch call routing information from home location register B (HLRB). (Page 9 of GSM technical specification).

##### **B. Haumont**

The Haumont publication describes a problem in which optimal routing is limited by tariff requirements. Haumont proposes bypassing the tariff requirement in some circumstances, for example, when a call is routed directly within a pre-specified user group (Abstract). In Haumont's

system, a subscriber's home location register (HLR) stores information about a user group to which the subscriber belongs. (Page 7, lines 15-19). When making a call, the HLR may check such information to see whether the tariff requirement should be bypassed, and the call established using a direct route (Page 9, lines 6-19). Similarly to the GSM technical specification, FIG. 4 of Haumont illustrates an optimal routing technique whereby information is exchanged with the home network by communicating directly with home location register B (HLRB). (Page 3, line 36 – Page 4, line 4).

C. Verkama et al.

The Verkama publication describes a problem in which reception of calls from outside of a subscriber's home network may be expensive. According to Verkama, using optimal routing may reduce the cost. Verkama describes a technique whereby a subscriber can still receive incoming calls even when the subscriber is outside of the local home network (Abstract). Similarly to Haumont, FIG. 5 of Verkama et al. illustrates an optimal routing technique whereby information is exchanged with the home network by communicating directly with home location register B (HLRB). (Page 3, lines 28 - 35).

D. Summary of References Relied Upon in the Office Action

As discussed above, the GSM technical specification, Haumont and Verkama all describe an optimal call routing technique whereby communications with a subscriber's home network are made directly with the subscriber's home location register (HLR). However, as described in the background of the present application, such an optimal call routing technique is not implemented in practice because mobile communication providers tend to protect their subscriber's personal information (Page 2, Step 8).

2. The Claims Distinguish Over the References

By contrast, claim 1 recites, *inter alia*, A Gateway Home Location Register (GHLR), comprising: a signaling transceiving module, connected to a subscriber information storage network element in the home network and a network element capable of fetching subscriber routing

information in the visited network .... and a routing information security analysis module .... to identify and analyze the signaling request according to security rules generated by the security rule configuration module. None of the references relied upon in the Office Action teaches or suggests a GHLR that includes a routing information security analysis module to identify and analyze a signaling request according to security rules generated by a security rule configuration module. Rather, each of the references relied upon in the Office Action describe communications that occur directly between a visited network and the subscriber's home location register (HLR). Therefore, claim 1 patentably distinguishes over the references relied upon in the Office Action. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Claims 2-9 depend from claim 1 and are therefore patentable for at least the same reasons.

Claim 10 recites, *inter alia*, a method of exchanging roaming subscriber routing information comprising the GHLR receiving the information request and determining the request according to security rules of the GHLR; if the request is accordant to this intercommunication security rules of the GHLR, according to step c; otherwise the GHLR rejecting the information requests. As should be appreciated from the above discussion with respect to claim 1, none of the references relied upon in the Office Action teaches or suggests determining a request according to security rules of a GHLR. Therefore, claim 10 patentably distinguishes over the references relied upon in the Office Action. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Claims 11-13 depend from claim 10 and are therefore patentable for at least the same reasons.

**CONCLUSION**

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Dated: July 27, 2007

Respectfully submitted,

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